THE USE OF NOMINALIZATION IN EMI STUDENT WRITING - A LONGITUDINAL PERSPECTIVE

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Abstract: ESL student writing development has been a concern in second language research. However, most of the current studies focus on the development in the language teaching context. The context of English as a medium of instruction (EMI) has been under-represented, in which how EMI students’ writing changes over time without teaching or explicit feedback on language has not been well-researched. This paper aimed at tracing the development of students writing in an EMI program in Vietnam. Particularly, the paper analyzed one particular aspect of syntactic complexity (i.e. nominalization), a construct considered important in developmental profiling of individuals (Lu, 2011; Vyatkina, 2013). Assignments from three EMI students were collected over three semesters and changes in their use of nominalization were closely investigated and developmental patterns were described. The results of the study inform ESL and SLA researchers and academics of how academic writing develops in a non-instructed environment and accordingly enable EMI program coordinators and designers to provide appropriate language supports to students during the course.”

Keywords: nominalization, syntactic complexity, writing, EMI, second language acquisition

1. Introduction

In recent years, English as a medium of instruction (EMI) has become a growing phenomenon all over the world. EMI has been increasingly implemented in universities, secondary schools and even primary schools, especially in Europe and Asia (Dearden, 2014). In Europe, EMI was used in up to 2400 undergraduate and master courses in more than 400 institutes in 2007, a 340% rise compared to 2002 (Doiz, Lasagabaster & Sierra, 2012).

In Asia, Asia Pacific Economic Cooperation (APEC) summit in 2012 agreed on facilitating staff and student mobility across the region, which gave way to the establishment of a number of EMI courses (Kirkpatrick, 2014).

The growing significance of EMI has led to a large body of research in the field at both macro and micro levels. At macro level, the concept extends beyond methodology into policy-making and language planning in each country. Issues under consideration are the role of English in language policies (Chang, 2006; Coleman, 2010), the relationship between English and the local languages (Coleman, 2011b), the effectiveness of the EMI policies (Coleman, 2011a) and factors influencing EMI adoption (Crystal, 2011; Lo Bianco, 2010; Wilkinson,
2012). However, Kaplan (2009) indicates that macro-level EMI research fails to approach the subtle changes and challenges facing each EMI stakeholder including teachers and students, which may lead to the failure of the macro language policy. In response to the need in the knowledge about EMI students learning process at a micro-level (Dang, Nguyen & Le, 2013; Kaplan, Baldauf & Kamwangamalu, 2011; Ramanathan & Morgan, 2007). This paper analyses a specific issue, namely, the development of syntactic complexity of student writing in EMI contexts.

2. Writing development in EMI contexts

ESL writing development is a fundamental concern in language acquisition research. Research in the field falls into two main streams, which are contrastive and cross-sectional studies and developmental and longitudinal ones. For the first group, a number of different criteria have been used for contrastive purposes such as comparison between native and nonnative speakers’ writing (Mancilla, Polat, & Akcay, 2015), between learners of different levels of English competence (Parkinson & Musgrave, 2014) or between writings of different genres (e.g. Lu, 2011; Yoon & Polio, 2016). Although contrastive studies are overwhelming, they fail to trace authentic developmental patterns of learners, neither can they capture the individual learning process in a holistic manner. Accordingly, developmental and longitudinal ones are highly suggested by many researchers for variability and nonlinearity (Vyatkina, 2013). Research of this group such as Mazgutova and Kormos (2015) or Vyatkina (2013) can trace the individual developmental pathways and differences between learners who follow the same instructional sequences. However, these studies are mostly carried out in English as a second language (ESL) or English for academic purposes (EAP) context and the elements of EMI setting are often neglected. Therefore, the improvement of students’ writing competence when English is not taught explicitly but only used as a vehicular language in learning other subject content is still an area worth investigating.

3. Syntactic complexity in ESL writing

In Applied Linguistics and Second Language Acquisition (SLA), syntactic complexity, accuracy, lexical complexity, and fluency (CALF) are standard criteria for assessing L2 writers’ level of linguistic performance, development, and global proficiency in the target language. Syntactic complexity refers to the variation of syntactic structures that are produced and the degree of sophistication of such structures. While syntactic complexity is just one part of writing proficiency, it is an important indicator since the amount of embedding and use of certain structures can facilitate the expression of complex ideas and the complicated relationships among them (Beers & Nagy, 2009).

A large variety of complexity measures have been explored in numerous L2 writing development studies. Wolfe-Quintero et al. (1998) reviewed 39 studies of the field and identified over 30 indices proposed for characterizing syntactic complexity. These measures typically seek to quantify one or more of the following: length of production unit, amount of subordination or coordination, range of syntactic structures, and degree of sophistication of certain syntactic structures. The levels of measurement include sentence, T-unit, clause, and phrase.
The current study focuses on one particular syntactic structure which is noun phrase because it is considered one of the strongest measurements of syntactic complexity in writing at higher level of proficiency (i.e. intermediate and above). Biber et al. (2011) note that for both L1 and L2 learners, writing development tends to be from the clausal complexity associated with conversation to the nominal complexity associated with academic writing. Their suggested progression is “from finite dependent clauses functioning as constituents in other clauses, through intermediate stages of nonfinite dependent clauses and phrases functioning as constituents in other clauses, and finally to the last stage requiring dense use of phrasal (nonclausal) dependent structures that function as constituents in noun phrases” (Biber et al. 2011, p. 29). In other words, syntactic complexity is increasingly constructed in the process of nominalization as writers develop their academic writing.

For university students, the ability to pack meaning into noun phrases, and to make their text nominally rather than clausally complex, becomes increasingly important. While nominalization is rare in conversation, close to 60% of noun phrases in academic prose have a pre- or post-modifier (Biber et al., 1999). The extended noun groups make text denser and at the same time, enables knowledge to be reconstrued as being largely about things/nouns (and thus able to be frozen in time and examined) rather than as a tension between things and actions, as clausal expression construes meaning. Moreover, expansion in use of noun modifiers leads to expansion in meaning as more information could be easily compressed in the modification and this expansion, in turn, may contribute to difficulty in using them.

In short, the current study is a longitudinal one which aims to examine the development of student’s writing competence in one specific aspect of syntactic complexity of nominalization in an EMI context.

4. Methodology

4.1. Research context

The study was carried out on an EMI program in a Vietnam university over 3 semesters from summer 2014 to summer 2015. While all students in the class are Vietnamese, the teachers are native speakers or Vietnamese teachers graduating from English speaking countries. English is the only language medium used in the course. The study started when the students entered their 3rd year and finished in their 4th year in university. During this time, the students were only enrolled in the content courses of their major (i.e. Business and Finance), and there were no English courses during this one year process. Their English proficiency was recorded as at A2, B1 and B2 (CEFR levels) before data collection time.

4.2. The datasets

For this exploratory investigation, one student was chosen randomly from each English proficiency group (i.e. A2, B1 and B2). For each of these three students, one assignment for a subject they were enrolled in each semester was selected based on the submission dates of the assignment. The assignments were respectively submitted in August 2014 (summer semester), December 2014 (winter semester) and July 2015 (summer semester). All of the assignments were in the form of essay and had more than 1,000 words. The coding symbols were as follows:
Case | A | B | C
--- | --- | --- | ---
English proficiency input | A2 | B1 | B2

<table>
<thead>
<tr>
<th>Submitted time</th>
<th>A</th>
<th>B</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>August 2014</td>
<td>Assignment 1 – case A</td>
<td>Assignment 1 – case B</td>
<td>Assignment 1 – case C</td>
</tr>
<tr>
<td>October 2014</td>
<td>Assignment 2 – case A</td>
<td>Assignment 2 – case B</td>
<td>Assignment 2 – case C</td>
</tr>
<tr>
<td>July 2015</td>
<td>Assignment 3 – case A</td>
<td>Assignment 3 – case B</td>
<td>Assignment 3 – case C</td>
</tr>
</tbody>
</table>

The first assignment is a review of a music performance; for assignment 2, students were asked to write an essay about an environmental issue while assignment 3 is an evaluation of service encounters.

4.3. Analytical scheme

After the assignments were collected, they were analyzed to examine the development of noun phrase complexity. In the first phase, the numbers of basic and complex noun phrases were counted for comparison. In this system, basic noun phrases refer to the noun phrases with only determiners and the head noun and complex noun phrases include those with further elements as pre- and post-modifiers. The independent clauses were counted to calculate the number of noun phrases per clause. The second phase focused on the noun phrase modification. Although the modification of the noun phrases could be divided into 11 types following the research by Biber et al. (2011), this study only focused on four types of post-modifier which are typical to show students’ competence of nominalization. The number of errors in each of these types were also counted to assess the students’ accuracy in using these modifiers. The data analysis process was conducted on Nvivo 12 Plus.

The analytical scheme was as follows:

<table>
<thead>
<tr>
<th>Type</th>
<th>Example (highlighted part) taken from the data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic noun phrase</td>
<td>The deforestation</td>
</tr>
<tr>
<td>Complex noun phrase</td>
<td>To-clauses as postmodifiers</td>
</tr>
<tr>
<td>-ed participle clauses as postmodifiers</td>
<td>Forest exploitation to serve human life</td>
</tr>
<tr>
<td>-ing participle clauses as postmodifiers</td>
<td>a projection room specifically designed to serve the workshop and the event for special customers</td>
</tr>
<tr>
<td>Relative clauses as postmodifiers</td>
<td>a lot of other instruments producing music</td>
</tr>
<tr>
<td>Independent clauses</td>
<td>new menu which brings delicious meals, nutritious and suitable for Vietnam’s income</td>
</tr>
<tr>
<td></td>
<td>Forest is part important in the environment as well as human life, but in recent years the deforestation is becoming more difficult to control in Vietnam. (2 clauses)</td>
</tr>
</tbody>
</table>

5. Results and discussions

5.1. The use of basic noun phrases vs. complex noun phrases

There is a slight difference in the use of basic and complex noun phrases by the three participants in their three assignments. This can be viewed in Table 1 and Graph 1.
Table 1: The use of basic NPs vs. Complex NPs.

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Complex noun phrases</th>
<th>Basic Noun phrases</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>References</td>
<td>Per clause</td>
</tr>
<tr>
<td>Assignment 1 - Case A</td>
<td>75</td>
<td>2.678571429</td>
</tr>
<tr>
<td>Assignment 2 - Case A</td>
<td>74</td>
<td>2.466666667</td>
</tr>
<tr>
<td>Assignment 3 - Case A</td>
<td>105</td>
<td>1.640625</td>
</tr>
<tr>
<td>Assignment 1 - Case B</td>
<td>80</td>
<td>3.636363636</td>
</tr>
<tr>
<td>Assignment 2 - Case B</td>
<td>26</td>
<td>0.702702703</td>
</tr>
<tr>
<td>Assignment 3 - Case B</td>
<td>105</td>
<td>1.346153846</td>
</tr>
<tr>
<td>Assignment 1 - Case C</td>
<td>67</td>
<td>1.425531915</td>
</tr>
<tr>
<td>Assignment 2 - Case C</td>
<td>12</td>
<td>0.5</td>
</tr>
<tr>
<td>Assignment 3 - Case C</td>
<td>114</td>
<td>1.027027027</td>
</tr>
</tbody>
</table>

References: the number of noun phrases in each writing
Per clause: the ratio of noun phrases in each independent clause.

Graph 1: Number of basic and complex NPs per clause

Graph 1 shows the tendency of choosing basic and complex noun phrases over time in different assignments among the three participants, which indicates the consistent choice of complex noun phrases over basic noun phrases by case A while the choice was less consistent in cases B and C. Although case B started out with greater preference for complex noun phrases, he/she ended up with a little more preference for basic noun phrases in the later two assignments.

Putting their language proficiency into consideration, although case A had the lowest English proficiency level at the onset of data collection, he/she showed a consistent use pattern while the other having higher proficiency did not. This might be due to the fact that students did not get language instruction from the 3rd year and the one who were conscious about the need to improve his/her language proficiency (case A) would have paid more attention to the choice. This is different from Mazgutova and Kormos (2015), in which all students demonstrated a more advanced choice of syntactic repertoire.

5.2. Changes in the use of complex noun phrases

Overall, case A used more complex NPs than cases B and C with the average
coverage of complex NPs in 3 assignments (calculated by words) of 0.523, 0.381 and 0.348 respectively.

Graph 2 indicates the decreasing tendency in the density of complex NPs per clause. While there was a slight fall in the use of complex NPs by case A, those numbers in cases B and C observed a larger fluctuation. In case B, the number reduced dramatically from a relatively high ratio of approximately 3.63 in assignment 1 to only one fifth of this number in assignment 2 and then increased slightly to approximately 1.34 in assignment 3.

The reduction in the use of complex NPs in all three cases could be explained by the lack of language learning during the EMI courses. The students tend to focus more on content and idea expression and ignore the features of academic writing as this was not the requirement of the courses and no feedback on language use was given during this process. One noteworthy point is this fall was less significant in case A whose language proficiency was still low. This could be due to his/her conscious learning to reach the English requirement at the end of the program.

5.3. Changes in the use of relative clauses as postmodifiers

Graph 3 shows different uses of relative clause as post-modifiers per NPs by the three cases in the assignments. Case C (with the highest proficiency level) used the most, followed by case B and finally case A, the one with lowest level of proficiency. However, only case A showed a stably increasing use pattern, from the ratio of 0.0266 for the first two assignments to 0.17 in the last assignment, nearly reaching those of the other two cases.

Case B and case C still showed fluctuations in the use of this particular syntactic unit, especially case C, who had the highest level of proficiency, showed a downward trend toward the end of the data collection.

This again reaffirms the assumption that the ones who are put in the position to improve language proficiency will consciously try to improve language during the course, while those with better English skills might not attempt to use the language feature, which is different from what Mazgutova and Kormos (2015) found.

5.4. Changes in the use of to- clause, -ed participle clause and -ing participle clauses as post-modifiers

A similar situation could be found in the use of to-, -ed and -ing participle clauses as post-modifiers, which are the more difficult
components of a complex noun phrase. Graph 4 illustrates the changes in using these post-modifiers. Case A used all three types of non-finite clauses as post-modifiers and with the upward trend towards the final assignment. Meanwhile, both cases B and C showed downward trends and only used -ed and -ing clauses.

Graph 4: Changes in the use of to-, -ed and -ing clauses as post-modifiers

5.5. Correctness of nominalization

5.5.1. Correct use of relative clauses

Graph 5 compares the ratio of correct relative clauses as post-modifiers in three cases. Cases B and C, with higher proficiency level, showed a much higher and stable ratio of correct relative clauses in the three assignments. Moreover, the changes in these two cases also followed the similar patterns. The accuracy of these post-modifiers increased from assignment 1 to assignment 2 and slightly decreased in the last one. Meanwhile, case A, with the lowest proficiency level, had fluctuation in the correct use of relative clauses as post-modifiers. In the last assignment, case A only made 22.2% of correct relative clauses while those of case B and case C were 90% and 95% respectively.

Graph 5: Ratio of correct use of relative clauses as postmodifiers

5.5.2. Correct use of non-finite clauses

As mentioned earlier, case A was the only student who used to-clause as post-modifier. However, though case A attempted to use to-clause twice, each in assignment 1 and 2, both of these uses were incorrect. Regarding ed-clauses, interestingly, all cases used this type correctly in all assignments. For ing-clauses, of all attempts to use this post-modifier among the three students, only case A made mistakes with the ratio of accuracy at 75%.

Findings about the ratio of correct use of relative and non-finite clauses indicate that case A has lower level of correctness than cases B and C though A had more attempts to use those features. This supports findings from Nguyen, Do, Nguyen & Pham (2015) and Nguyen, Do, Pham & Nguyen (2018) about the role of corrective feedback in second language acquisition.
6. Conclusion and suggestions for further studies

6.1. Conclusion

The findings show that lower proficiency student attempted to use more academic language features (nominalization). Firstly, although the choices between basic and complex NPs were not significantly different, case A with the lowest level of proficiency showed consistent preference of complex NPs over basic NPs. Secondly, case A used more complex NPs than the others and showed only a slight decrease over time. In terms of both relative clauses and non-finite clauses as post-modifiers, case A showed more attempt to use various types and with an upward trend over the three assignments. These facts could be explained by the student’s conscious learning to reach the output English requirement of the undergraduate program.

Despite his/her attempt to use more clauses in post-modifiers, the lower proficiency learner was able to make fewer correct clauses, compared to higher proficiency ones. However, he/she had an upward trend towards correct use while higher proficiency ones showed more complex movements.

Furthermore, in contrast with Rogier (2012), there was unclear evidence of the students’ language improvement during the EMI courses, particularly for the students with higher proficiency levels. In fact, some aspects in the variety and accuracy of academic features showed a downward trend including the decreasing density of complex NPs per clause, the fluctuations in the use of relative clause modifiers and the limited use of some types of non-finite clause modifiers. This might be due to the differences in the genre of measurements, Rogier (2012) used IELTS instead of students’ academic assignments and familiarity of IELTS test format might be a reason for performance improvement in his study.

6.2. Suggestions for further studies

Firstly, the research had no control over the genres and levels of difficulty of the assignments. These factors, obviously, could influence the students’ writing performance. Secondly, the examination of one specific feature of nominalisation is not enough to make conclusion about students’ writing development. Therefore, further research should be carried out using more data and more syntactic complexity measurements with the consideration of genres and levels of difficulty for more holistic results.

Regarding the field of EMI, the study suggests that although entry level of language proficiency is important, there is a need to provide language support for the learners to maintain language proficiency and academic performance accordingly.

References


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Từ khóa: danh từ hóa, độ phức hợp về cú pháp, kỹ năng viết, tiếng Anh như một công cụ giảng dạy, thụ đắc ngôn ngữ thứ hai